

BOOK REVIEW

HARRY S. PARIS. **The Drawings of Antoine Nicholas Duchesne for his Natural History of the Gourds.** (ISBN 9782856536049, hbk.). Muséum National d'Histoire Naturelle, Publications Scientifiques, Diffusion 57 Rue Cuvier, F-75231 Paris Cedex 05, France. (**Orders:** www.mnhn.fr/publication, diff.pub@mnhn.fr, 33 (0)1 40 79 48 05). \$257.00, 454 pp., 258 color plates, 17 1/2" × 12 3/4".

French horticulturalist and botanist Antoine Nicholas Duchesne (1747–1827) was born at Versailles. Duchesne became a careful observer of nature under the tutelage of his scholarly and well-traveled father, and later under Bernard de Jussieu (the second of the five de Jussieus of botanical history) at the King's Garden in Paris, who was himself tutored by Linnaeus. Duchesne corresponded with Linnaeus on botanical matters, particularly on his first interest, in the relationships and hybridization of strawberries. Though it was unusual at the time for a botanist to restrict himself to in-depth studies of the type that we now call monography, in one of his letters to Duchesne, Linnaeus said, "When you have completed the history of the wild strawberries, you will have accomplished something which I long have hoped that some botanists would do; namely, that they would each choose their plant family and examine it most thoroughly; in this manner would soon be attained the ultimate knowledge of plants which now floods botanists with its abundance."

Duchesne's first work, *L'Histoire naturelle des frasiers (Natural history of the strawberries)*, was published in 1766 when he was only 19 years old. One product of this research included his own botanical illustrations, in pencil and ink (though he lacked the funds to see them published in his lifetime). Duchesne was particularly interested in plant sexual systems as they pertained to the creation of domesticated plants, and through cross-pollination experiments he developed (and attempted to retrace the parentage of) various strawberry cultivars. His experiments led him to the idea of what we now call the biological species concept, a refutation of the doctrine of constancy or immutability of species as maintained by other naturalists of his era. He called himself a "cultivator botanist," distinct from other botanists who observed without experimentation. After all, this was the Age of the Enlightenment.

His next major work focused on pumpkins, squash, and gourds of the genus *Cucurbita*. All *Cucurbita* species arose in the New World and thus only became known to Europeans after 1492. Initially the various species and cultivars of *Cucurbita pepo* were grown in Europe for ornamental interest only, but over time many more were developed that were more palatable and better suited to the long day lengths of northern summers. Duchesne was drawn to *Cucurbita* for its incredibly varied fruit characteristics (pleasing to the eye and hand of a botanical artist), but he also found this to be a genus perfectly suited to more cross-breeding experiments, and a similar mystery of origins of forms, recalling his first love of strawberries.

Most of Duchesne's writing and illustrations produced from this period did not come to light until recently, and in this book his entire collection of illustrations of *Cucurbita* is published for the first time. The author Dr. Harry Paris, one of the foremost experts on *Cucurbita*, is responsible for finally locating Duchesne's rumored illustrations in the Library of the Natural History Museum in Paris. Contained in this massive tome (falling somewhere between a folio and elephant folio at 44.5 cm in length and weighing approximately 6 kg) are 361 of Duchesne's illustrations, mostly of those cultivars commonly called gourds. These illustrations include pencil sketches and pen-and-ink works but the majority are full-color watercolors (258 color plates). The primary focus is on the form and color patterns of fruits, and their textures, with a loving attention to warty protrusions of all kinds. Since this book is gigantic, many of these illustrations approach life-size. The works range from hazy impressionistic arrangements to startlingly photo-realistic pieces worthy of any Dutch Master's still life. Included here too are a number of Duchesne's illustrations of *Cucurbita* flowers and their developmental stages, and pencil studies of the growth patterns of the vines, which are more delicate works in general.

Also included are a number of brief yet substantial chapters (in both English and French) interpreting the biography of Duchesne and botanical significance of his work, as well as a chapter on the botany of the genus *Cucurbita*, and a glossary and index to scientific names. This is the *sine qua non* coffee table book for any fan of cucurbits, horticulture, or botanical illustration, but with the interpretive chapters bookending the illustrations, this book is also of significance and utility to systematists.—Amanda K. Neill, Director of the Herbarium (BRIT-SMU-VDB), Botanical Research Institute of Texas, 500 East 4th Street, Fort Worth, Texas 76102-4025, U.S.A.